UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

245 Federal Building
Salt Lake City, Utah
September 15, 1938

Mr. T. H. Humpherys, Secretary
Utah Water Storage Commission
Salt Lake City, Utah

Rel Price River

Dear Mr. Humpherys:

As agreed in the conference held September 8, 1938 in your office attended by Messrs. E. B. Debler, E. O. Larson, E. G. Nielsen, H. E. Wilbert and myself, all representing the Bureau of Reclamation, and by yourself representing the Utah Water Storage Commission, I am submitting herein a summary covering the outline of the present investigations of the Price River and Gooseberry projects; present status of these investigations; and in order that everyone concerned may be informed, a program of the work contemplated in completing these investigations.

The plan of the investigations in brief is to make a comprehensive study to determine the adequacy of the water supply for the lands under present canals diverting from the Price River, together with possible ultimate utilization of any surplus water of Price River, either by the development of new lands in the Price River Basin, or by transmountain diversion to the San Pitch and/or Spanish Fork rivers in the Salt Lake Basin. The waters which might be diverted under this latter plan would be used on already developed lands now having an inadequate water supply.

Price River:

A survey of the irrigated area in the Price River Basin, together with a survey and classification of arable non-irrigated lands, has been completed by the Bureau of Reclamation as part of a similar work program being conducted throughout the Colorado River Basin. Results of soil surveys classifying irrigated and

non-irrigated lands under present canals in the Price River area are available in two reports -- one made in 1934 by F. O. Youngs of the Bureau of Soils and Dr. D. S. Jennings of the Utah Agricultural Experiment Station; and one made in 1936 by the Resettlement Administration. From these surveys, the irrigation requirement of lands under present canals has been estimated.

The total water supply on Price River, assuming complete development of Scofield Reservoir, has been determined by detailed studies. From the results of these studies, the water supply in excess of requirements of lands under present canals and therefore available for further development has been determined. The probable effect of the operation of the proposed Gooseberry Project on the water supply of the Price River has also been determined.

A topographic survey of Scofield Dam and the drilling of nine test holes have been completed preparatory to making a design and cost estimate for reconstruction or repair of the Scofield Dam.

A reconnaissance field examination has been made to determine roughly the feasibility of irrigating undeveloped lands in the Clark Valley area located about twelve miles east of Price by diversion of surplus waters from Price River. This examination covers two alternate lines for reaching the area. No further surveys of these lines are contemplated.

A brief field examination has been made to determine the feasibility of irrigating lands near and adjacent to Gordon Creek, a tributary of Price River, by diversion from Fish Creek below Scofield Reservoir through a tunnel to Gordon Creek, and thence by canal to the lands. No further survey of this feature is contemplated.

In order to complete the work on Price River, it is planned to prepare plans and cost estimates for the repair of Scofield Dam, and to make a brief field examination and collection of data to determine the feasibility of developing new lands above and adjacent to the present main canals on the Price River by pumping from these main canals. It is estimated that this work will involve an expenditure of $1100.

Gooseberry Project:

The general plan of the Gooseberry Project contemplates a transmountain diversion from the headwaters of Price River and

Huntington Creek, with waters so diverted furnishing a supplemental supply for all the developed lands in the vicinity of Fairview, Mount Pleasant, Spring City, and Moroni. The principal features of this project are: the construction of Gooseberry dam, reservoir, and tunnel; Boulger and Brooks Canyon feeder canals; and the Gooseberry Highline canal. Surveys, designs, and estimates for these features have been made and are contained in the Gooseberry unit of the "Report on Sanpete Division, Salt Lake Basin Investigations, Utah," Volumes I and II, by E. O. Larson, which report was made in 1933. Copies of this report are on file in the office of the State Engineer. The plans and estimates of the Gooseberry dam and tunnel contained in Mr. Larson's report will probably be revised to reflect present design standards and unit costs.

Detailed studies to determine the probable amount of water that can be diverted under the original plan have been completed. Water stage recorders have been installed on the Gooseberry Creek and Boulger Creek to determine the discharge records for the 1938 season in order to substantiate runoff estimates based upon previous records obtained in 1928, 1929, and 1931.

An alternate plan contemplates the direct diversion of the natural flow of Gooseberry and Brooks Canyon creeks by a proposed canal extending from Brooks Canyon to the east portal of the Gooseberry Tunnel, and the construction of the Gooseberry Tunnel and Gooseberry Highline Canal as outlined in the original plan.

The work still to be completed includes the following: a revision of the plans and estimates of the Gooseberry dam and tunnel, completion of discharge records of Gooseberry and Boulger creeks for the 1938 season, and determination of divertible water under the alternate plan. The cost for completion of this work is estimated to be $1200.

Price-Spanish Fork River Diversion:

The general plan of this part of the investigations is to determine the feasibility of transmountain diversions from the Price River drainage basin to the Spanish Fork River in the Salt Lake Basin. Diversions from the north and east forks of White River, a tributary of Price River, to the head of Spanish Fork River by way of Soldier Summit are physically possible. It is also physically possible to divert water from Scofield Reservoir, either by a canal from Scofield Reservoir to Soldier Summit, or by a tunnel from the reservoir to the South Fork of Soldier Fork, a tributary of Spanish Fork River.

Fly-line surveys have been completed preparatory to making cost estimates for the construction of the White River diversion canals. A water stage recorder was placed on White River below the forks near Soldier Summit on April 22, 1938 to obtain at least one year's record on which to base the water supply studies for the White River diversion.

A fly-line survey of the canal line from Scofield Reservoir to the head of Spanish Fork River by way of Soldier Summit has been completed preparatory to making cost estimates.

A preliminary stadia traverse has been completed to determine the approximate length of a tunnel from Scofield Reservoir to the South Fork of Soldier Fork, a tributary of Spanish Fork River, preparatory to making a cost estimate for construction of that tunnel. A brief geologic examination of the tunnel site has been made by Associate Engineer M. Merriman of the Bureau of Reclamation.

The work still to be accomplished includes the completion of cost estimates of the White River diversion canals, completion of the discharge records on White River, a study of water supply on White River to determine the amount of divertible flow, completion of the estimate for construction of the Scofield Reservoir-Spanish Fork River diversion canal, a more detailed complete survey of the Scofield Reservoir Tunnel, and preparation of a cost estimate for the construction of the tunnel. The cost for the completion of this work is estimated to be $400.

The total estimated cost to complete the investigations as herein outlined, including an estimate of $300 for the preparation of the final report, is $3,000. It is anticipated that the work outlined will be completed about December 1, 1938, provided the schedule of work in the Denver office permits the completion of designs and estimates within a reasonable time.

In the event that this program as outlined is in accordance with your understanding of the work to be accomplished, will you please send me a letter in confirmation thereof.

Very truly yours,

J. Wayne Cahoon

J. Wayne Cahoon
Assistant Engineer

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